

The President's Conference on

**FIRE
PREVENTION**



ACTION PROGRAM

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Washington, D.C.

May 6,7, and 8, 1947

“The serious losses in life and property resulting annually from fires cause me deep concern. I am sure that such unnecessary waste can be reduced. The substantial progress made in the science of fire prevention and fire protection in this country during the past forty years convinces me that the means are available for limiting this unnecessary destruction.”

Harry S. Truman

THE PREFACE

The Action Program adopted by the President's Conference on Fire Prevention is recommended as a means of reducing fires which during the last decade have resulted in an estimated 10,000 deaths each year.

The fire toll has been rising since 1934. In 1946, we experienced the most destructive year in our recent history with a property loss of \$561,487,000, an increase of 23 percent over 1945. This large, unnecessary waste of lives and property can be reduced by an all-out Nation wide effort.

I believe the keys to the fire prevention problem are Education, Enforcement, and Engineering. We need widespread education in methods of fire prevention and control, more adequate laws and their rigid enforcement and better engineering to make buildings fire resistant.

The program outlined in this report has consolidated all of these features as developed by the six committees of the Conference. It should, therefore, serve as the basis for an effort in fire prevention which it is hoped will be confirmed with ever increasing activity throughout every state, city and town. Only by this means can we reduce this mounting toll of lives and economic waste.

PHILIP B. FLEMING,
Major General, U.S.A.
General Chairman,
The President's Conference on Fire Prevention

The President's Conference on Fire Prevention

THE PROBLEM

The rising fire waste in this country with its tremendous sacrifice of life and destruction of property is a staggering national problem.

The loss of life resulting from such fire is appalling with an estimated average of 10,000 deaths annually for the past 10 years.

The property loss has steadily increased since 1934 reaching a total of \$561,487,000 in 1946, and it now appears that unless prompt action is taken to reduce this needless waste the figures for 1947 will be much greater. Actually the losses for the first three months of 1947 approximate \$193,862,000.

Even a nation prodigiously endowed with natural resources and with the wealth and economic stability of the United States cannot continue to absorb, without permanent impairment, the profligate loss year after year of a half-billion dollars in irreplaceable material resources. In an era such as the present, when there is a universal scarcity of nearly every commodity needed to feed, clothe and shelter not only our own people but the starving and war-torn world about us as well, the destruction becomes not only more tragic but completely inexcusable.

OBJECTIVES OF THE CONFERENCE

The objectives of the Conference as adopted by the Coordinating Committee are to emphasize to the public the ever-present danger of fire to human life and material resources and to intensify the work of fire safety in every community.

Essential to the accomplishment of these objectives are:

1. Universal acceptance by the highest officials of the States and municipalities of their direct responsibility for fire safety. The acceptance of the same principle by Federal executives charged with the responsibility for Federal properties is requisite.
2. Public support from all possible sources behind such officials in accomplishing the enactment and enforcement of adequate laws and ordinances for fire prevention and fire protection.

It is generally agreed that much can be accomplished in the improvement of the desperate fire waste situation facing our country through fostering and encouraging a greater sense of individual responsibility on the part of each citizen. Carelessness and recklessness – the human element – constitute a major contribution to our annual toll of death and destruction by fire. But

the *educational* approach has its limitations and must be fortified and supported by the application of modern, scientific methods and techniques of construction, protection, firefighting and statutory requirements. These are the roles of *engineering* and *enforcement* in the fire prevention field. The importance of each approach is recognized in the balanced, comprehensive action program of the Conference.

This action program has been prepared from the reports approved by the Conference on Fire Prevention called by the President of the United States. It outlines the fundamental steps which it is believed must be followed by all citizens of this country if we are to reduce the appalling loss of life and property due to fire.

All too long the public has felt that the subject of fire prevention can be left primarily for the attention of insurance organizations, chambers of commerce and a few private associations. It must, however, be recognized as an important obligation not only of each State and municipality, but also of each individual. It is not a problem that can be solved by institutions as annual Fire Prevention Week in the fall or a Clean-up Week in the spring, valuable as such periodic campaigns may be. It must be a day-by-day, year-around activity in which every man, woman and child participates.

The program recommended is based on sound and tried principles and embraces all fields including education, law and its enforcement, building construction, engineering and research in fire prevention, and the most efficient use of the firefighting services.

In its consideration of the problem the Conference has had the voluntary services of many representatives from public and private agencies throughout the country who have cooperated to the fullest extent in an endeavor to prepare a complete and well-rounded program. From this effort, it is believed a real beginning has been made in coordinating activities which will arouse behind public officials the support needed for successful accomplishment of our objectives, which is so essential to the welfare of the Nation.

THE PROGRAM

The essential features of the action program have been incorporated from the reports of the six committees of the Conference and are summarized briefly. These committees designated are as follows: Building Construction, Operation and Protection; Firefighting Services; Fire Prevention Education; Laws and Law Enforcement; Research; and Organized Public Support. These several committee reports are available in printed form and present detailed information and recommendations on the various subjects.

The Conference recommends that the widest possible publicity be given this program and that prompt action be initiated along the lines suggested. In this connection attention is specifically directed to the plan of action presented by the Committee on Organized Public Support.

BUILDING CONSTRUCTION, OPERATION AND PROTECTION

The committee emphasized the importance of new building construction of proper design and the correction of serious deficiencies in existing structures.

It is essential that the architect provide for the requisite safety to life and resistance to fire in the design of structures; that the responsible officials assure the full enforcement of pertinent laws, ordinances and regulations; and that the owner, operator and occupants of buildings recognize and assume their responsibility for safety to life and the elimination of fire hazards.

Specific recommendations to these ends are as follows:

1. Buildings should be designed and construction materials including interior finish should be selected for resistance to fire consistent with height, area and use of the structure. Adequate fire cut-offs or barriers should be provided to prevent spread of fire, smoke and gases, both vertically and horizontally. Consideration should be given to the prevention of spread of fire from adjoining buildings.
2. The design of exit ways should conform to the basic principle that two independent and easily accessible means of exit should be provided. These exit ways should be of a necessary design and construction to prevent admittance of fire and smoke. Stair towers should be fully enclosed and equipped with self-closing doors.
3. The delegation of enforcement authority of building and fire prevention ordinances should be clearly defined and necessary steps taken to insure the closest cooperation between the building department and fire department or other enforcement agencies. Municipalities should maintain adequate staffs for such enforcement providing sufficient salaries to attract and retain qualified personnel.
4. Adequate fire detection and protection equipment should be provided as needed for the prompt discovery and extinguishment of fires in all buildings. This equipment includes hand-extinguishing equipment, hose, standpipes, automatic sprinklers and alarm systems.
 - a. Hand equipment is advised for general use in most buildings including manufacturing and mercantile establishments, storage buildings, schools, hospitals, hotels, theaters and offices. It also has a proper place in the home particularly in isolated locations. By its prompt use, many serious fires may be prevented.
 - b. More general use of automatic sprinkler systems is recommended for the protection of all large industrial and mercantile buildings as well as schools, institutions, hotels and places of public assembly.
 - c. Special extinguishment equipment should be used more generally for protection of flammable liquids and other materials of special fire hazard.
 - d. In addition to other protective features, night watchman service should be provided in all hotels, hospitals and institutions where a considerable number of people are sleeping or confined. The quality of this service should be improved and more active

intelligent and well-trained men should be employed for this service. Watchman service should always be recorded.

5. Building codes now in effect should be examined and revised, when necessary, to assure that the technical provisions are in conformity with modern fire protection practices. Adequate provision should be made for correcting deficiencies in existing buildings.
6. Building owners and managers must make certain that conditions conform to recognized construction, exit, and maintenance requirements, even in the absence of specific laws and ordinances; safety regulations covering essential features such as housekeeping, smoking and flammable liquids, should be strictly enforced; periodic inspection service and training of employees is advised.
7. Public water officials should periodically review the adequacy of distribution systems and water supplies, instigating the appropriation of funds for needed improvements.

LAWS AND LAW ENFORCEMENT

Many of the existing statutes, codes and ordinances in the field of fire prevention are antiquated and obsolete. This unfortunate lag of the law behind technical achievements in the field allows dangerous buildings to escape the regulation which is essential to the safety of human life.

Specific recommendations are as follows:

1. Each State and each municipality should initiate, immediately, a study to determine whether its present fire prevention regulations are so antiquated and obsolete as to create perils to human life. (The Conference adopted the recommendation that the several groups or interests promoting recommended building codes meet in continuous conference for the purpose of reaching full agreement on the basic and fundamental provisions and make report thereof to the continuing committee.)
2. Recognizing that engineering and other technical knowledge is discovering constantly new materials and new methods for building construction which render existing fire prevention regulations inadequate, each State and municipality should create a continuing advisory board of experts charged with the duty of making recommendations which will keep the respective State or City fire prevention regulations up to date.
3. Fully realizing the dangers inherent in so-called "model building codes" and standards designed by certain industries for their own protection, cities should be given adequate legal authority to adopt properly prepared, and approved "model" codes and standards by reference, or by some other simplified method, to avoid the prohibitive cost of publishing lengthy codes in local newspapers.

The incorporation, by reference, should be to a named code as of a certain fixed date to avoid delegation of legislative powers to the preparers of the "model" code or standard and

adequate provisions should be made to insure that copies of the “model” code or standard which is adopted by reference are readily available.

4. Adoption of a general ordinance containing legally sufficient standards governing building maintenance and construction with reference in such a general ordinance to certain properly prepared and approved “model” codes and standards as “prima facie” evidence of compliance with such standards is another method of avoiding the prohibitive cost of publishing lengthy building codes which should receive the most careful study.

5. Adoption of Statewide fire prevention laws and building codes is a subject which needs further study by all interested in adequate fire prevention. Division of enforcement responsibility and administrative problems, which appear to be rather difficult in connection with a Statewide building code do not appear to be an impediment where the State legislation covers specific subjects such as places of public assembly, hotels and other structures designed primarily for public use or subject to a particular hazard. Where such State laws are desirable, division of enforcement responsibility should be avoided.

6. In the entire field of fire prevention there is no subject that needs attention more than that of statute and ordinance enforcement. Steps should be taken by all States and cities to insure that they are not among the States and cities where future disasters are caused by lack of adequate enforcement of existing laws.

7. Creation by the Council of State Governments, the National Association of Attorneys General, the United States Conference of Mayors and the National Institute of Municipal Law Officers of standing committees with a militant program on building codes and fire prevention ordinance is highly desirable. The drafting by representatives of these organizations of a model statute permitting adoption of codes and ordinances by reference is recommended.

FIRE PREVENTION EDUCATION

All who have accepted school stewardship in any degree are obligated by that degree to establish and maintain fire-safe conditions within their sphere of influence.

We owe the 30 million young people in our schools today the best instruction possible in fire safety. Basic fire prevention instruction should be intensified and expanded at all levels of education and in all types of schools – public, private and parochial.

Any basic education approach to the fire prevention problem as a whole should channel instructions through all school levels, urban and rural, in forms adapted to different levels and to varying conditions. In some 40 forest States of the Union, for example, forest fires are a high hazard and education in the prevention of forest fires should be part of instructional programs in all schools from elementary to college levels.

Specific recommendations to this end follow:

1. Each State department of education should encourage the development of fire-safe school properties and designate responsibility for its successful completion.
2. The school administrator must take every action necessary to insure that safe escape, in event of fire, is a virtual certainty.
3. Local and country elementary school systems can do much in the education of children in fire prevention by including it as an integral part of the curriculum.
4. Appropriate committees should be organized locally for the study and revision of the curriculum in order that fire-safety instruction will be up to date at all times.
5. The superintendent of schools should provide the leadership for developing and instituting a continuing program of education for fire prevention.
6. The development of a coordinated program of fire prevention education in the teacher's college curriculum requires that the curriculum include all educational materials and activities that will prepare and qualify teaching personnel to include this subject as an important part of their teaching responsibility.
7. Students and teachers should be encouraged to participate in community and home fire prevention activities, and school fire prevention activities should be closely related to community problems, thus developing fire safety habits.
8. At the college level, fire safety should be integrated with such courses as chemistry, and physics. Greater attention should be given to this subject in appropriate courses in schools of business administration, and in insurance, economics and transportation courses.
9. Existing courses for engineering and architectural students should include fundamentals of fire protection.
10. The use of visual educational material for instructional purposes should be extensively expanded.
11. Close liaison should be maintained between the educators and the fire services. The local fire departments can be of major assistance to the schools in implementing their fire programs. Such cooperation would include a fire college in each State under control of a leading college or university.

FIREFIGHTING SERVICES

The Conference believes that the fire service of this country is of vital importance in plans for concerted action in the field of fire prevention; that there are wide differences in the relative effectiveness of various fire departments; that much of this is due to the blind devotion of

citizens and public officials to their local fire departments, and because they understand neither their responsibilities nor are aware of the possibilities of effective fire department service.

Specific recommendations to this end are as follows:

1. Fire departments should be regarded as fire prevention as well as firefighting agencies and substantial parts of their budgets be devoted to fire prevention activities, one phase of which would be educating the public.
2. Insurance rating agencies should review their gradings of cities to see if it is possible to provide additional incentives for fire prevention work by fire departments.
3. Ways should be explored to remove obstacles to the fire department being a desirable career service.
4. Ways should be explored for meeting the increased cost of fire department and economies sought only after careful study.
5. All fire departments should adopt orderly programs for the replacement of fire apparatus with modern equipment, including special equipment for technical application where required.
6. Fire departments should study the operations they are likely to have to perform in fighting fires in all large properties and disaster plans should be developed in all areas to cover fire department operations.
7. The traditional design of public water systems for fire protection should be reviewed in the light of war experience.
8. Adequate public fire alarm systems should be provided and radio used where appropriate to supplement wired intercommunication systems in fire departments and for rural areas.
9. All fires should be thoroughly investigated to establish the idea of personal responsibility for fire prevention.
10. All fire departments should maintain inspection service of buildings and firefighting equipment, enforcing necessary regulations. All members of the fire department should receive training in fire prevention work and be expected to promote fire prevention. In larger fire departments there should be a fire prevention bureau. The younger, better-educated members of the department should be chosen for permanent fire prevention assignments and specially trained for such work.
11. The few States not now having State fire marshals should establish such an officer or vest fire marshal powers in some State official with properly qualified staff to provide fire prevention bureau service where it is not provided by the municipalities.

12. Firemen's training should be recognized as one measure of an effective fire department.

13. Continuing, systematic, up-to-date programs of training for firemen are necessary in order that firemen may discharge their responsibilities in firefighting and fire prevention. Every fire department not having a training program should establish and maintain one commensurate with its training needs.

14. The armed services (including National Guard), the merchant marine, the forest services, industrial, mercantile, institutional and governmental establishments which maintain fire departments should be encouraged primarily for their own personnel to develop and extend existing training programs. Where appropriate specialized training facilities are available, provisions should be made for extending this training to other firemen.

15. The possibilities should be explored for the establishment at training centers such as those now existing or contemplated by certain States, of suitable buildings and other equipment, so that operational training (one phase of the complete training program) may include use of equipment in actual fires.

16. All States should enact legislation enabling rural governmental bodies such as townships, counties or special fire protection districts, to provide public firefighting service.

17. That a State rural fire protection committee be established in each State to promote a Statewide program for rural fire prevention and protection, including coordination of rural and forest protection service.

RESEARCH

Continuous research in the field of scientific development and in human behavior with respect to fire and safety to life is essential to provide the latest information for intelligent fire prevention work and for modernization of laws, ordinances and regulations.

Specific recommendations to this end are as follows:

1. The need for ready availability of information, complete and up to date, pertaining to the subject of fire prevention, fire protection, fire-loss experience and research developments is emphasized; a central library facility would serve this need.
2. Since panic behavior contributes to loss of life in fire, it is recommended that additional educational programs be sponsored which will indoctrinate the public in the conduct of the individual and the group in the stress of an emergency created by fire.
3. A standard means should be determined of selecting and training firemen and other persons whose work makes them responsible for fire safety, employing scientific methods of screening and selection which proved their practicability in the military services.

4. All individuals legally charged with originating fires of the pyromaniac type should be subjected to a competent mental examination and abnormal persons hospitalized. The practices determining the release of such individuals from institutions should be reviewed and standardized.
5. A National Marine Fire Conference should be established to explore the problems of marine fires and to disseminate pertinent information.
6. In the field of aviation, research work on fire safety, continuing that already initiated, is endorsed; every airport must have suitable fire protection facilities; requisite studies should be made to determine practical applications of crash protection and life-saving operations; and adequate regulation of flying over areas of specialized hazard to life and property requires full cooperation of appropriate authorities.
7. Continued cooperation of all concerned in our industrial affairs in the exchange of findings from research and field experience so that fire prevention may add to its accomplishments in safety of persons and conservation of created resources is recommended.
8. While endorsing the National, State, local governmental and private programs for fire prevention and control for our natural resources, the Conference recommends continuous research to improve, where practicable, methods of fire prevention and control in these essential fields.

THE PLAN OF ACTION

In order to implement the recommendations contained in this report and enlist the active public support in every community in the Nation which is essential to the successful application of this balanced program, the Conference urges the following action to be undertaken immediately.

It is Recommended:

1. That a continuing committee be appointed by the General Chairman in order to implement the Action Program of the President's Conference, provide a gauge on progress made in States, cities, and rural communities throughout the country in the months following the Conference and maintain the interest in fire prevention on the part of the large number of important national nongovernmental groups represented on the Committee on Organized Public Support, as well as the general public.
 - a. It is suggested that the personnel of this continuing committee include representatives of the organizations comprising the membership of the coordinating committee, together with the secretaries of the six Conference committees.
 - b. This continuing committee should have a secretary and whatever small secretariat is necessary to carry on its work effectively.

- c. In recommending the appointment of this continuing committee, there is no thought of establishing a new agency to deal with fire prevention on a national scale, either as an official or voluntary group. The purpose of the continuing committee is solely to follow up after the Conference to make certain that the entire Nation benefits from the recommendations made and the interest created.
 - d. It is proposed that the continuing committee function primarily through the facilities offered by the large number of nongovernmental, national organizations represented on the Committee on Public Support.
 2. That each of the Governors of the 48 States, the Governors of the territories, and the Commissioners of the District of Columbia appoint Statewide fire-safety committees composed of the appropriate public officials, including State foresters and representatives of nongovernmental groups, to explore the fire loss problem in all its ramifications within their respective jurisdictions for the purpose of setting up practical fire prevention programs tailored to the needs in each particular area.
 - a. As soon as possible after the President's Conference on Fire Prevention, a Statewide fire safety conference should be called by each of the Governors.
 - b. It is urged that organizations such as those comprising the Committee on Organized Public Support and any other organizations interested be invited to serve on the State fire-safety committees and participate in the Statewide fire-safety conference through its appropriate State unit or representatives.
 3. That where an effective fire prevention committee does not already exist, the mayors, city managers, or chief executives of all cities, towns, villages or other municipalities appoint a fire-safety committee composed of both public officials and representatives of nongovernmental organizations to carry on a continuous campaign of fire safety throughout the year.
 - a. It is urged that organizations such as those comprising the Committee on Organized Public Support and any other organizations interested be invited to serve on the local fire-safety or fire prevention committee through its appropriate local unit.
 - b. In counties that are primarily rural, local or community fire-safety or fire prevention committees should be created.
 - c. State and local fire-safety committees should give special attention to giving assistance in the securing of long-term loans on favorable terms to be used for repairs essential to safety of life.
 4. That each of the National and State organizations represented on the Committee on Organized Public Support be urged to endorse and support within the limits of the objectives set forth in its chapter constitution or bylaws the recommendations of the President's Conference on Fire Prevention. Each organization should extend the fullest cooperation possible to the National, State and local levels.

Note: For amplification of the items set forth in this action program, refer to the reports of the respective committees of the Conference, which will be available from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D. C.

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